



TECHNOLOGY TRANSITION INITIATIVE

Accelerating delivery of mature technology to the Warfighter



What Is TTI?

DoD Science and Technology (S&T) Labs produce cutting-edge tools for our warfighters. However, under the current federal government's budgeting process, it often takes up to 5 years to get these tools to those out in the field. During that time, many projects either become technologically obsolete or are cancelled due to lack of funds. The

Technology Transition Initiative (TTI) was created in 2002 to fund such technology projects, enabling them to complete their development and testing phases in a timely manner and to meet all of the federal government's requirements for final funding and purchase.

TTI Criteria

- Technology developed with DoD Science and Technology (S&T) funding
- Product has buyer with funds available to purchase it in later years
- Preferably Joint or Multi-Service project (2 or more Services/Agencies)
- Cost sharing between TTI and Service/Agency is encouraged to leverage funding
- TTI Project duration less than four years

How Does The TTI Selection Process Work?

1. The science and technology and acquisition executives of each military department and Defense Agency and the commanders of the unified and specified combatant commands nominate projects to be funded.
2. The TTI Program Manager identifies the most promising projects that meet DoD technology goals and requirements in consultation with the Technology Transition Council.
3. The TTI Program Manager and the appropriate acquisition executive can share the transition cost. Service/Agency contribution can be up to 50% of the total project cost. A project cannot be funded for more than four years.

What Are The Currently Funded TTI Projects?

- Missile Health Monitoring
- * Terminal Attack Control (TAC) Earplugs
- Battlespace Terrain Reasoning and Awareness (BTRA)
- * Unmanned Vehicle Spiral Upgrade (IROS3 Spartan)
- Lightweight Steel Track
- Low-Cost Flame Resistant Coverall
- Battlefield Intrusion Detection System (BIDS)
- Joint Theater Logistics
- Coalition Theater Logistics
- Overwatch
- Titanium Nitride (TiN) Coating for T-58 Engine Compressor Blades
- Special Operations Forces (SOF) Alternative Power Sources
- * Water Purification System/Water Pen Unit
- Special Operations Forces (SOF) Demolition Kit

** These projects are highlighted on the following pages.*

Terminal Attack Control (TAC) Earplugs

Objective:

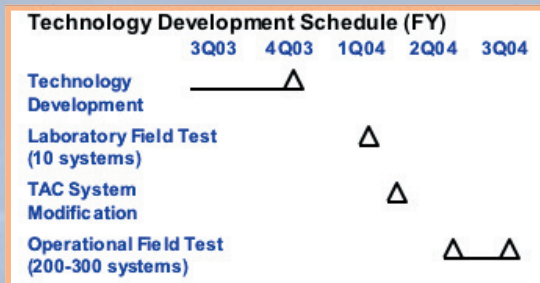
The Air Force proposed to bridge the gap between Air Force Research Lab (AFRL) S&T funding and \$8.5 million in procurement funding in the FY05 AFSOC APOM.

Participants:

Defense S&T Source: AFRL

Procurement Funding Source: TAC Program Element 27423F

Procurement Activity: Electronics Systems Center



Technology:

The TAC earplug system is a custom-molded device integrated with tactical radios and an external microphone. It provides blast protection, increased communications in high noise environments, and allows for enhanced natural hearing in quiet, clandestine environs. The potential exists for additional procurement by all Services.

Residuals:

TAC box, cables for radios and aircraft communications, and remote push-to-talk.

Before



After



Unmanned Vehicle Spiral Upgrade (IROS3 Spartan)

Objective:

The Navy proposed to bridge the gap between the Spartan ACTD and the IROS3, allowing the Spartan to be integrated into shipboard command and control systems two years early.

Participants:

Defense S&T Source: NSWC Crane

Procurement Funding Source: N76 (Surface Warfare Division)

Procurement Activity: N76—ACTD intends to transition to an Acquisition Program including Littoral Combat Ship

Schedule:

Jul 03–April 04: In use operationally on the USS Gettysburg, part of the Enterprise Carrier Strike Group.

Technology:

IROS3 is an Antiterrorism/Force Protection system that integrates sensor information with semi-automated engagement capability to provide shipboard protection pier side, at anchor, and while transiting restricted waterways. It offers a network-centric approach that provides integrated surveillance and C2 capability.

Residuals:

Spartan (or any unmanned surface vehicle) will be baselined into the system. Test data and video will be available for future use.

Comments:

Once this integration effort is complete, IROS3-equipped ships will be able to operate Spartan as an integral combat capability. IROS3 is planned for installation on all surface combatants.



Water Purification System/Water Pen Unit

Objective:

The DARPA proposed for the Water Purification System/Water Pen Unit to bridge the gap between DARPA funding and procurement in FY 05.

Participants:

Defense S&T Source: DARPA

Source of Procurement Funding: Various Operational Units (GSA Catalog)

Procurement Activity: Various Operational Units

Technology:

Mixed oxidants electrochemically generated from common table salt via several small lithium camera batteries kill a wider range of resistant microorganisms (e.g., Cryptosporidium, Giardia, and E. Coli) present in contaminated, non-brackish water than more traditional means of disinfection (e.g., chlorine and iodine).

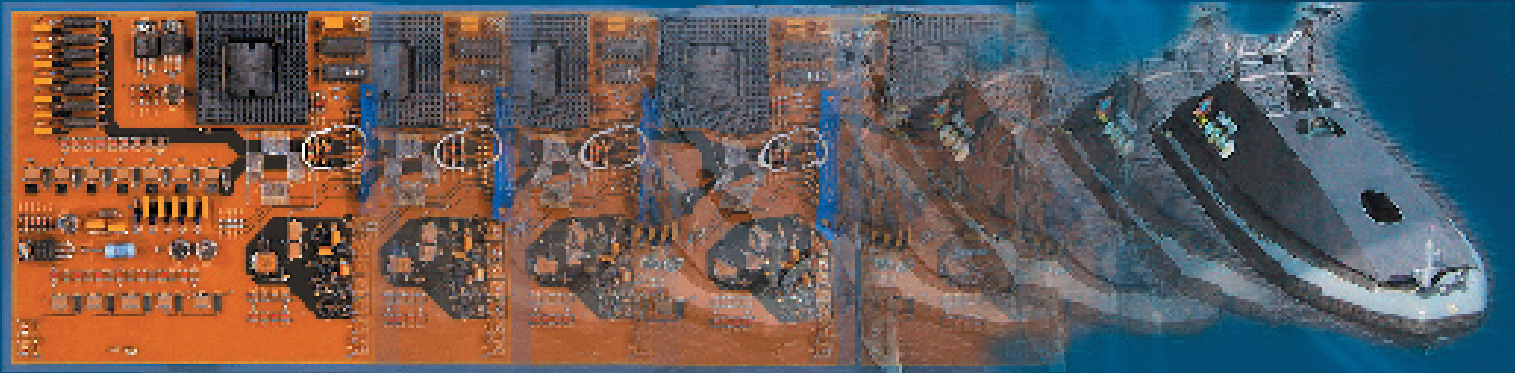
Residuals:

Water Pen Unit

Comments:

For tactical situations in which deployed troops do not have quick and easy access to potable water, the pen would enable soldiers to treat up to 300 liters of any available, non-brackish water source, eliminating the risk of their exposure to diseases and bio-chemical pollutants.





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For more information on TTI,
visit the Office of Innovation and Technology Integration
at the Advanced Systems and Concepts Office Website:

www.acq.osd.mil/asc/

